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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/320,702	05/27/1999	TOMOYUKI HANAI	450100-4893	5176

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EXAMINER	
HOYE, MICHAEL W	

ART UNIT	PAPER NUMBER
2614	6

DATE MAILED: 10/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/320,702	HANAI ET AL.	
	Examiner	Art Unit	
	Michael W. Hoye	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-22 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-22 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 27 May 1999 is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: S21 in Fig. 7 and S56 in Fig. 12. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities:

- On page 3, line 1 of the 2nd paragraph of the section "Summary of the Invention" the word --is-- should be added after the word "invention".
- On pages 4 and 5, on the first line of each paragraph the same correction as described above should be made.
- On page 4, line 18, after the word "device" the word --that-- should be added.
- On page 9, line 7, the word "decode" should be –decoder--.
- On page 9, line 7, and page 10, lines 1, 3, 5, and 10, "CPU44" should have a space to read --CPU 44--.
- On page 10, line 8, "remote controller **53**" should be --**61**--.
- On page 11, line 21, "CPU106" should have a space to read --CPU 106--.

- On page 25, lines 3-4, "steps S45 through S51" and "steps S5 through S11" do not appear to match up as the same processing.

Appropriate correction is required.

Claim Objections

3. Claim 11 is objected to because of the following informalities: after the word "EPG" the word --data-- should be added. Appropriate correction is required.

Claim 15 is objected to because of the following informalities: the claim reads that it is dependent on itself and appears to be dependent on claim 14. Appropriate correction is required.

Claim 20 is objected to because of the following informalities: the claim is currently written as an independent claim, but the claim appears to be dependent on claim 19. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 2, 6 and 9-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 2 and 10 recite the limitation "said program" in line 3 of claim 2, and on page 32, line 3 of claim 10 respectively. There is insufficient antecedent basis for this limitation in the claims.

Claims 6 and 9 recite the limitation "said supplementing information" in lines 1-2 of each claim. There is insufficient antecedent basis for this limitation in the claims.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 3-4, 6-7 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Hawkins et al (USPN 6,005,561).

As to claim 1, note the Hawkins et al reference which discloses a transmit device. The claimed EPG data generation means is met by the head end broadcasting a program guide or EPG (see col. 6, lines 37-48 and col. 78-11). The claimed supplementing means is also met by the transmission system or head end, which generates supplemental information containing the program data quantity or length of the program and may be added or incorporated with the EPG data (see col. 11, lines 19-67). The claimed transmit means to multiplex program data with EPG data added with supplemental information and transmitting the information as a digital signal is met by the server node or head end which transmits the data stream including media objects, motion video, data objects, broadcast programming content information, broadcast programming information program guide in a multiplexed fashion through the use of a MPEG-2 data transport (see col. 8, lines 38-56 and col.23, lines 45-57).

As to claim 3, the claimed supplementing means further contains information indicating the program category is met by the head end providing category information (see col. 11, lines 40-43, col. 19, lines 27-31, and col. 21, line 35).

As to claims 4 and 6, the method of claims is rejected based on the same arguments given above for claims 1 and 3.

As to claims 7 and 9, the claimed program to supply a record media is met by the Hawkins et al reference (see col. 8, lines 38-50) and by the same arguments made above for claims 1 and 3.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 2, 5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hawkins et al.

As to claim 2, the Hawkins et al reference discloses an average size and bit requirement or rate for each particular object, including a short video or program (see Fig. 5 and col. 12, lines 58-65), in Fig. 6, Hawkins discloses the amount of storage required by all media objects (col. 13, lines 14-16), and in Fig. 8, Hawkins discloses size requirements, overall bandwidth (or bit rate) requirements, and transmission times (col. 17, lines 36-53). Hawkins et al does not explicitly disclose adding the information indicating the data quantity of a program as average bit rate data

to the EPG data. However, the examiner takes Official Notice that it is notoriously well known in the art of data transmission to transmit the data quantity of a program as average bit rate data to the receiver for the advantage of determining whether or not the receiver has sufficient storage capacity. Therefore, it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to have added the information indicating the data quantity of a program as average bit rate data to the EPG data for the advantage of allowing a user to select a program for recording or storage through the use of an EPG, whereby the user will be prompted if sufficient storage space is not available on the storage medium through obtaining program data quantity and average bit rate data.

As to claim 5, the claimed method is rejected based on the same arguments given above for claim 2.

As to claim 8, the claimed program to supply a record media is met by the Hawkins et al reference (see col. 8, lines 38-50) and by the same arguments made above for claim 2.

10. Claims 10, 13-16, 19 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hawkins et al, in view of Browne et al (WO 92/22983).

As to claim 10, note the Hawkins et al reference which discloses a record device or user terminal. The claimed receive means is met by the user terminal (see col. 6, lines 37-52), which receives the EPG data added with supplemental information indicating the length or quantity of a program as described above in claim 1 for the transmission of data to the receiver or user terminal. The claimed program data is transmitted as a digital signal (see col. 6, lines 53-57 and col. 8, lines 41-48). The claimed control means to extract said supplemental information from

the EPG data is met by the decoder which extracts the information from the media objects such as the EPG (col. 6, lines 46-52 and col. 10, lines 1-11). Hawkins discloses record media (col. 10, lines 49-67 and col. 18, lines 12-13), and also discloses a length of program or running time and average bit rate as described above in claim 1. Hawkins does not explicitly disclose controlling the selection of the record media for recording program data based on the quantity of the record media. However, Browne et al discloses a multi-source recorder player where the selection of the record media for recording the program data based on the quantity of said record media may be controlled as shown in Figs. 3 and 6, where programs may be stored in the storage section 104 or in an external recording device, and if there is not sufficient storage capacity available in the storage section 104, programs may be automatically erased or may be manually erased by a user (see pg. 18, the last paragraph – pg. 21, line 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the head end/user terminal device of Hawkins et al with the recorder player of Browne et al for the advantage of having the capability to manually or automatically control the selection of record media based on the quantity of the record media. One of ordinary skill in the art would have been led to make such a modification since it would be beneficial to have sufficient space available for recording program data and having the ability to control selection of record media based the quantity of the record media would allow for greater flexibility in recording program data.

As to claim 13, Hawkins et al discloses the claimed record device wherein the record media is comprised of one unit as met by the user terminal with a storage medium (col. 18, lines 11-12).

As to claims 14 and 15, the Browne et al reference discloses digital outputs112g and 112h as shown in Fig. 1, along with additional outputs 112a – 112f, for sending output to various external devices including additional recording devices (see pg. 16, lines 1-14). Although the Browne et al reference does not explicitly disclose that the record device is connected by way of a bus to external record media, the examiner takes Official Notice that it is notoriously well known in the art of consumer electronics devices, such as recording devices, to connect additional devices to a device by means of a bus, such as, an IEEE 1394 configuration bus for the advantage of allowing quick and easy connection to additional devices and, more importantly, allowing for high speed digital transmission between the devices. Therefore, it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to incorporate a bus, such as an IEEE 1394 configuration bus, for connecting a recording device to an external recording media for the advantages given above.

As to claim 16, the claimed method is rejected based on the same arguments given above for claim 10.

As to claim 19, the claimed media for providing a program is met by the Hawkins et al reference (see col. 8, lines 38-50 and col. 18, lines 11-12) and by similar arguments made above for claim 10.

As to claim 22, the claimed system and methods are rejected based on similar arguments given above for the combination of claims 4 and 16 (or 1 and 10).

Allowable Subject Matter

11. Claims 11-12, 17-18 and 20-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

As for claim 11, the prior art, alone or in combination, does not teach or fairly suggest a record device which receives EPG data added with an average bit rate data as information indicating the data quantity of a program, control means that calculates the data quantity of a program from the average bit rate data, and controls selection of a record media to record program data based on program data quantity and the capacity of the record media. As for the most pertinent prior art of record, the Hawkins et al (USPN 6,005,561) reference discloses an average size and bit requirement or rate for each particular object, including a short video or program (see Fig. 5 and col. 12, lines 58-65). In Fig. 6, Hawkins discloses the amount of storage required by all media objects (col. 13, lines 14-16), and in Fig. 8, Hawkins discloses size requirements, overall bandwidth (or bit rate) requirements, and transmission times (col. 17, lines 36-53). However, Hawkins et al does not explicitly disclose adding the information indicating the data quantity of a program as average bit rate data to the EPG data, and there is no suggestion to control selection of a record media. The Hawkins reference does not teach or suggest a record device, wherein the receive means receives data EPG added with an average bit rate data as information indicating the data quantity of a program, the control means calculates the data quantity of said program from said average bit rate data, and controls selection of a record media

to record said program data based on said program data quantity and the capacity of said record media. In the applicants' invention, the record device as described above is disclosed.

As for claim 12, the prior art, alone or in combination, does not teach or fairly suggest a record device wherein the control means has supplemental information further indicating the program category, and the control means controls selection of a record media to record said program data based on information indicating said program category and on category information set for said record media. As for the most pertinent prior art of record, the Hawkins et al (USPN 6,005,561) reference discloses the head end providing category information (see col. 11, lines 40-43, col. 19, lines 27-31, and col. 21, line 35). However, Hawkins et al does not explicitly disclose controlling the selection of a record media to record said program data based on information indicating said program category and on category information set for said record media, and there is no suggestion to control selection of a record media based on category information. The Hawkins reference does not teach or suggest a record device, wherein the control means has supplemental information further indicating the program category, and the control means controls selection of a record media to record said program data based on information indicating said program category and on category information set for said record media. In the applicants' invention, the record device as described above is disclosed.

As to claims 17 and 18, the claimed method would be allowable based on the same reasons given above for claims 11 and 12 respectively.

As to claims 20 and 21, the claimed media for providing a program would be allowable based on the similar reasons given above for claims 11 and 12 respectively.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bruls (US 2002/0012530) – Discloses an encoding device for encoding a program using average bit rate and a recording device for storing the program.

Bruls (USPN 6,459,850) – Discloses an encoding device for encoding a program using average bit rate and a recording device for storing the program.

Dunn et al (USPN 5,861, 906) – Discloses an interactive entertainment network system and method for customizing operation thereof according to viewer preferences, the system further includes video on demand programs which include the length of the program and category lists for each program.

Hirai (USPN 6,115,341) – Discloses a digital signal recording method and apparatus and digital signal reproduction method and apparatus.

Kato et al (USPN 6,151,360) – Discloses a method for encoding a video signal using bit rate information.

Metz et al (USPN 5,978,855) – Discloses downloading applications software through a broadcast channel.

Mori et al (US 2001/0003554) – Discloses a recording system using bit rate information.

Zetts (USPN 6,378,129) – Discloses video data rate and program size information for video transmission.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael W. Hoye whose telephone number is (703) 305-6954. The examiner can normally be reached on Monday to Friday from 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller, can be reached at (703) 305-4795.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Michael W. Hoye
September 30, 2003

JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600